

TABLE

Overall length of ships	Length of mooring line	Break-ing strength
40 m or more but not more than 60 m.	110 m	10 MT
More than 60 m but not more than 90 m.	110 m	15 MT
More than 90 m but not more than 120 m.	110 m	20 MT
More than 120 m but not more than 180 m.	110 m	28 MT
More than 180 m but not more than 222.5 m.	110 m	35 MT

Elongation of synthetic lines shall not exceed 20%

(68 Stat. 93-96, 33 U.S.C. 981-990, as amended and sec. 4, 5, 6, 7, 8, 12 and 13 of sec. 2 of Pub. L. 95-474, 92 Stat. 1471)

[39 FR 10900, Mar. 22, 1974, as amended at 47 FR 51121, Nov. 12, 1982; 48 FR 20691, May 9, 1983; 48 FR 22545, May 19, 1983; 61 FR 19551, May 2, 1996; 65 FR 52913, Aug. 31, 2000; 70 FR 12970, Mar. 17, 2005; 74 FR 18994, Apr. 27, 2009; 75 FR 10689, Mar. 9, 2010]

§ 401.11 Fairleads.

(a) Mooring lines shall:

(1) Be led at the vessel's side through a type of fairlead or closed chock, acceptable to the Manager and Corporation;

(2) Pass through not more than three inboard rollers that are fixed in place and equipped with horns to ensure that lines will not slip off when slackened and provided with free-running sheaves or rollers; and

(3) Where the fairleads are mounted flush with the hull, be permanently fendered to prevent the lines from being pinched between the vessel and a wall.

(b) Wire lines shall only be led through approved roller type fairleads.

[39 FR 10900, Mar. 22, 1974, as amended at 70 FR 12971, Mar. 17, 2005; 74 FR 18994, Apr. 27, 2009; 76 FR 13089, Mar. 10, 2011]

§ 401.12 Minimum requirements—mooring lines and fairleads.

(a) Unless otherwise permitted by the officer the minimum requirements in respect of mooring lines which shall be available for securing on either side of

the vessels, winches and the location of fairleads on vessels are as follows:

(1) Vessels of more than 100 m but not more than 150 m in overall length shall have three mooring lines—wires or synthetic hawsers, which shall be independently power operated by winches, capstans or windlasses. All lines shall be led through closed chocks or fairleads acceptable to the Manager and the Corporation.

(i) One shall lead forward and one shall lead astern from the break of the bow and one lead astern from the quarter.

(ii) One synthetic hawser shall be hand held and lead astern from the break of the bow through chocks to suitable mooring bitts on deck;

(2) Vessels of more than 150 m in overall length shall have four mooring lines—wires, independently power operated by the main drums of adequate power operated winches as follows:

(i) One mooring line shall lead forward and one mooring line shall lead astern from the break of the bow.

(ii) One mooring line shall lead forward and one mooring line shall lead astern from the quarter.

(3) Vessels of more than 150 m in overall length shall have four mooring lines—wires, independently power operated by the main drums of adequate power operated winches as follows:

(i) One mooring line shall lead forward and one mooring line shall lead astern from the break of the bow and shall be independently power operated by the main drums of adequate power operated winches; and

(ii) One mooring line shall lead forward and one mooring line shall lead astern from the quarter and shall be independently power operated by the main drums of adequate power operated winches.

(iii) All lines shall be led through a type of fairlead acceptable to the Manager and the Corporation.

(b) Unless otherwise permitted by the officer, the following table sets out the requirements for the location of fairleads or closed chocks for vessels of 100 m or more in overall length:

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Overall length of ships	For mooring lines Nos. 1 and 2	For mooring lines Nos. 3 and 4
100 m or more but not more than 180 m.	Shall be at a location on the ship side where the beam is at least 90% of the full beam of the vessel.	Shall be at a location on the ship side where the beam is at least 90% of the full beam of the vessel.
More than 180 m but not more than 222.5 m.	Between 20 m & 50 m from the stern.	Between 20 m & 50 m from the stern.

[74 FR 18994, Apr. 27, 2009, as amended at 75 FR 10689, Mar. 9, 2010; 76 FR 13089, Mar. 10, 2011]

§ 401.13 Hand lines.

Hand lines shall:

- (a) Be made of material acceptable to the Manager and the Corporation;
- (b) Be of uniform thickness and have a diameter of not less than 15 mm and not more than 17 mm and a minimum length of 30 m. The ends of the lines shall be back spliced or tapered; and
- (c) Not be weighted or have knotted ends.

[70 FR 12971, Mar. 17, 2005]

§ 401.14 Anchor marking buoys.

A highly visible anchor marking buoy of a type approved by the Manager and the Corporation, fitted with 22 m of suitable line, shall be secured directly to each anchor so that the buoy will mark the location of the anchor when the anchor is dropped.

[70 FR 12971, Mar. 17, 2005]

§ 401.15 Stern anchors.

(a) Every ship of more than 110m in overall length, the keel of which is laid after January 1, 1975, shall be equipped with a stern anchor.

(b) Every integrated tug and barge or articulated tug and barge unit greater than 110m in overall length which is constructed after January 1, 2003, shall be equipped with a stern anchor.

[68 FR 36748, June 19, 2003]

§ 401.16 Propeller direction alarms.

Every vessel of 1600 gross registered tons or integrated tug and barge or articulated tug and barge unit of combined 1600 gross registered tons or more shall be equipped with—

(a) Propeller direction and shaft r.p.m. indicators located in the wheelhouse and the engine room; and

(b) Visible and audible wrong-way propeller direction alarms, with a time delay of not greater than 8 seconds, located in the wheelhouse and the engineer room, unless the vessel is fitted with a device which renders it impossible to operate engines against orders from the bridge telegraph.

(68 Stat. 93–96, 33 U.S.C. 981–990, as amended and secs. 4, 5, 6, 7, 8, 12 and 13 of sec. 2 of Pub. L. 95–474, 92 Stat. 1471)

[41 FR 12227, Mar. 24, 1976, as amended at 45 FR 52378, Aug. 7, 1980; 70 FR 12971, Mar. 17, 2005; 71 FR 5606, Feb. 2, 2006]

§ 401.17 Pitch indicators and alarms.

Every vessel of 1600 gross registered tons or integrated tug and barge or articulated tug and barge unit of combined 1600 gross registered tons or more equipped with a variable pitch propeller shall be equipped with—

(a) A pitch indicator in the wheelhouse and the engine room; and

(b) Effective April 1, 1984, visible and audible pitch alarms, with a time delay of not greater than 8 seconds, in the wheelhouse and engine room to indicate wrong pitch.

(68 Stat. 93–96, 33 U.S.C. 981–990, as amended and secs. 4, 5, 6, 7, 8, 12 and 13 of sec. 2 of Pub. L. 95–474, 92 Stat. 1471)

[47 FR 51122, Nov. 12, 1982, as amended at 70 FR 12971, Mar. 17, 2005; 71 FR 5606, Feb. 2, 2006]

§ 401.18 Steering lights.

Every vessel shall be equipped with:

(a) A steering light located on the centerline at or near the stem of the vessel and clearly visible from the helm; or

(b) Two steering lights located at equal distances either side of the centerline at the forepart of the vessel and clearly visible from the bridge along a line parallel to the keel.

[49 FR 30935, Aug. 2, 1984]

§ 401.19 Disposal and discharge systems.

(a) Every vessel not equipped with containers for ordure shall be equipped with a sewage disposal system enabling compliance with the Canadian Garbage